Facets on Trust and Doubts in Information Interpretation and Consumption

The Third International Conference on Advances in Information Mining and Management
The Third International Conference on Social Eco-Informatics

November 17 - 22, 2013 - Lisbon, Portugal

Moderator: Andreas Schmidt
IWI - Karlsruhe University of Applied Sciences &
IAI - Karlsruhe Institute of Technology, Germany

Panellists:
Simon Atkinson  University of Sydney, Australia
Ludovico Boratto  Università di Cagliari, Italy
Dirk Labudde  University of Applied Sciences, Mittweida, Germany
Richard Lucas  University of Canberra, Australia
Ariella Richardson  Jerusalem College of Technology, Israel
Kazuyuki Shimizu  Meiji University, Japan
What is Trust? [1]

[mass noun]: (1) firm belief in the reliability, truth, or ability of someone or something:

relations have to be built on trust

they have been able to win the trust of the others

- acceptance of the truth of a statement without evidence or investigation:

  I used only primary sources, taking nothing on trust

  - the state of being responsible for someone or something:

    a man in a position of trust

  - ...

verb [with object]: (1) believe in the reliability, truth, or ability of:

  I should never have trusted her

[1] Definition of ‘trust’ in the Oxford Dictionary:
http://www.oxforddictionaries.com/definition/english/trust
What can we Trust (or not)?

- Information
  - source
  - provider
- Interpretation mechanism
  - Human
  - Software/hardware
    - Algorithm correct and applicable
    - Vendor/developer of the software
    - Implementation of an application
What can we Trust (or not)?

- Infrastructure
  - Operating systems
    - trusted computing (very controversy)
    - proprietary vs. open source
  - Cloud provider
  - Communication channel
    - encryption algorithm
    - encryption implementation
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Joseph Heller (Catch-22):
Just Because You're Paranoid, Doesn't Mean They're Not After You
Trusts & Doubts in Information Interpretation & Consumption

Complex Creo Simplex

Complex Civil Systems Research Group & Project Management Programme

Associate Professor Simon Reay Atkinson
Respect the hard-won scientific gains of those in whose steps [you] walk; share such knowledge as is [yours]; apply, for the benefit of [all], all measures [that] are required, avoiding those twin traps of over [specification] and [professional] nihilism; remember that there is art to [empiricism] as well as science, and that warmth, sympathy, understanding and [the desire to work together] may outweigh the [demands to act or wish to prescribe]. To use your knowledge [for the betterment of humankind and our environment] and not be ashamed to say ‘I know not’, nor [be unprepared to collaborate with colleagues] or to place [your] capacities at the disposal of people not respecting the humans’ right. To take all responsibility for your acts and not to discharge your responsibilities in any manner on others. Not to use your knowledge at destroying ends and to face this awesome responsibility with great humbleness and awareness of your own frailties. To practice your profession in all intellectual honesty, with conscience and dignity and most especially to tread with care in matters of life and death. Not to allow that considerations of religion, nationality, ethnicity, sex, rank, social standing or policy carry injury to people concerned with your actions. Above all not to play at God and to remember that you remain a member of society, with special obligations to all your fellow human beings: to always act so as to preserve the finest traditions of your calling and for long experience the joy of [responding] to those who seek and are needful of your help.

Based on Louis Lasagna’s,(then Academic Dean of the School of Medicine at Tufts University) 1964 ‘Modern’ Hippocratic Oath; the H. E. T. Haultain / Rudyard Kipling (1922) (private and undeclared ‘though’ not secret?) ‘Ritual obligation of the calling of an engineer’ and the UN General Assemblies’ 1948 ‘Declaration of Human Rights’. 
Risk may be a function of both the *Likelihood* of an *adverse event* occurring and a system or person’s *ability to comprehend, explain and understand by logic*.

Trust may be a function of the *Likelihood* of a person or system being able to *comprehend, explain, understand by logic* and *deal* with a set of outcomes or events.
Info/Techno-Socio systems seek to program (as opposed to programme) the relationship between technical processes and humans by digitizing performance fidelity and coding for repeatable risk-free procedures in computer-control-spaces so that data and communication do not [temporally] contradict each other.

By contrast: Socio-Info/Techno systems stress the reciprocal interrelationship between humans and computers to foster improved shared awareness for agilely shaping the social programmes of work, in such a way that humanity and ICT [control] programs do not contradict each other.

The two systems are also considered in terms of their signatures, where:

- IT-S systems are considered as strong-signal systems, in which: System Information and Communication are the key variables, and:

- Weak-signal S-IT systems, in which: Influence (through shared awareness) and Control (through switching) of Information and Communication are the key variables.
Management & Control may be a function of rules, time, bandwidth and fidelity, whereas Command & Leadership may be a function of influence, trust, collaboration and agility.


**Debit, ergo cogito, ergo sum**
(I doubt, therefore I think, therefore I am)
Descartes.
The Third International Conference on Social Eco-Informatics:

SOTICS 2013

http://www.iaria.org/conferences2013/SOTICS13.html

Simon Reay Atkinson

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Programme

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Facets on Trust and doubts in Information Interpretation and Consumption — Panel Discussion

20 November 2013
What does it mean to trust?

The Abilene Paradox

- Going along to get along
- Failure to communicate
- Inaccurate perceptions and assumptions

http://www.businessdictionary.com/definition/Abilene-paradox.html
Some Thoughts

- There are many things that I believe or desire that are not worthy of my trust
- What makes me worthy of my trust is my capacity to evaluate my beliefs and desires  
  Lehrer, p.3

Life is never so ordered or choices so forced that the need for trustworthiness can be eliminated  
  Kohn, p.5

What are we trusting  
  - the information, the medium, or the messenger?
Another Thought

... regard numbers, graphs, and formulas first of all as strategies of communication. They are intimately bound up with forms of community, and hence also with the social identity of the researchers. Porter (1996, p. viii)
Trust is possible where:
— distrust is possible,
— deception is possible.
Trust in, and for, Yourself


Richard
CAN WE TRUST INFORMATION INTERPRETATION?

Ariella Richardson
Input - information as raw data

- Handwriting deficiency classification
  - Time series of: pressure, tilt, azimuth

- Text mining
  - Letters and other characters

- Cuneiform feature selection (Archeology)
  - 3d mesh

Task – Interpret the information
Domain Expert Knowledge

- Handwriting
  - Writing is composed of letters
  - “In-air” and pressure features (known) to be important

- Text mining
  - Words have average length of 5 letters

- Archeological cuneiform feature selection
  - The stylus is shaped as a tetrahedron
Can we **trust** information interpretation?

- Do we expect to know how information is interpreted in advance or only in retrospect?

- Do expert knowledge/our expectations affect interpretation?

- Is there really a single correct interpretation of information?
  - How do we measure correctness of interpretation?
Group Recommendation

- Group recommendation is designed for contexts in which more than a person is involved in the recommendation process.

I’m on a diet
I’m vegetarian!
I love Asian food

Where should we dine?
Trust in social recommendation

- Social recommender systems follow the epigram “Tell me who your friends are, and I will tell you who you are” [Cacioppo and Berntson, 1994] [Falcone et al., 2003] [Ricci et al., 2011].

- The recommendations generated by these systems are based on information coming from a trust network [Victor et al., 2012].

  - A social network which expresses how much the members of the community trust each other.
Discussion

- Can we extend the notion of trust to a group recommender system?
  - We know how similar the preferences of two users are
  - Can we use similarity as a form of trust in another user’s preferences?
  - If we have an outlier (i.e., a user very dissimilar from the others), can we avoid considering her/his preferences from the group model?

- Aspects to consider:
  - The accuracy for the users in the trust network increases
  - Based on the numbers of outliers, the overall accuracy of the system might worsen


Facets on Trust and Doubts in Information Interpretation and Consumption
Control between incentives and property (rent?)

PANEL IMMM/SOTICS 2013
November 20, 2013 - Lisbon, Portugal

Kazuyuki Shimizu
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Email shimizuk@meiji.ac.jp
How could we share this pizza?

What is ethical behavior?
Overview

1. What is ethical behavior?
2. Theory of Moral sentiment (1759)
3. Problem of current market economy.
   – “Edward Snowden Case” and “Bank secrecy
     “The Social Responsibility of Online Charge-free Service Providers;
     Accountability for use of the term "free" ”
4. Conclusion
2. Theory of Moral sentiment (1759)

- Back to round 17th and 18th century, when price (Market) system was born.

- Industrial Revolution
  (Spinning factory. Steam engine Thomas Newcomen in 1712)

2. Theory of Moral sentiment (1759): organizational theory

A) Historical Background
  (Robinson Crusoe in 1719.)

  a. Mercantilism or absolutism: Globalization

  b. Physiocracy: It immediately preceded the first modern school, classical economics, which began with the publication of Adam Smith's The Wealth of Nations in 1776.
2. Theory of Moral sentiment (1759)

Judgment
(impartial spectator)

sympathy
3. Problem of current market economy.

- **Edward Snowden Case**: Someone’s Privacy protection distract an prevention of international terrorism.
- **Democratic=Freedom**

- **Swiss Banking Case**: Bank secrecy (or bank privacy) is a legal principle in some jurisdictions under which banks are not allowed to provide to authorities personal and account information about their customers unless certain conditions apply.
- **Absolutism=Need Privacy**
# The World's Billionaires

03.10.10, 06:00 PM EST

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<tr>
<th>RANK</th>
<th>NAME</th>
<th>CITIZENSHIP</th>
<th>AGE</th>
<th>NET WORTH ($BIL)</th>
<th>RESIDENCE</th>
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<tr>
<td>1</td>
<td>Carlos Slim Helu &amp; family</td>
<td>Mexico</td>
<td>70</td>
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<td>2</td>
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<td>8</td>
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<th>Name</th>
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<th>Value of Holdings</th>
<th>Change</th>
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<tr>
<td>Bill Gates</td>
<td>MSFT, CNI, RSG</td>
<td>22.55 B</td>
<td>▼263.85 M -1.16%</td>
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<tr>
<td>Carlos Slim Helu</td>
<td>AMX, GPFOY, MSNFY</td>
<td>50.37 B</td>
<td>▲876.65 M 1.77%</td>
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<tr>
<td>Amancio Ortega</td>
<td>IDEXY</td>
<td>57.84 B</td>
<td>▼960.96 M -1.63%</td>
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<td>Larry Ellison</td>
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<td>40.49 B</td>
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<td>Christy Walton</td>
<td>WMT, FSLR</td>
<td>33.50 B</td>
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<tr>
<td>S. Robson Walton</td>
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<td>Sheldon Adelson</td>
<td>LVS</td>
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<td>▼612.87 M -2.01%</td>
</tr>
</tbody>
</table>

http://www.forbes.com/billionaires/list/

Dr. K. Shimizu
Control between incentives and property (rent?)

- Theory of Moral sentiment could still apply to a case by case situations.
- How?
  - Social network (Church) in the past
  - Google?! Or Facebook
- incentives and property has changed?
  - Pizza?! 
  - Depend on quality and quantity of Information is key for better understanding?
  - Could we do more ethical compared in the past?
How could we share this pizza?

Baby could not eat pizza!? Anyway.

Or get the idea through out from Google?
Thank you for your attention!
(No question, please give me just your comment.)